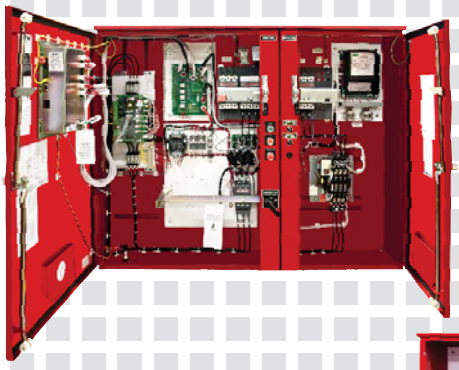
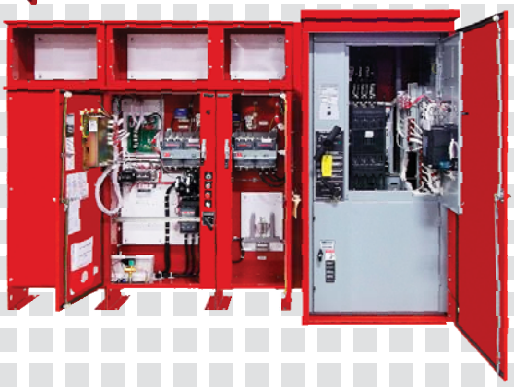
Power Transfer Switches





Firetrol®

EMERSON™
Network Power

Completely assembled with fire pump controllers.

Firetrol® power transfer switches are available completely assembled with Firetrol electric fire pump controllers – full voltage or reduced voltage types.

The entire package of power transfer switch and controller is completely factory assembled, wired, tested and shipped as a complete unit for easy field connection to the power sources and the fire pump motor. The power transfer switch and the electric fire pump controller are assembled in separate but connected enclosure compartments. All wiring between the two enclosures in completed by Firetrol.

Approvals
The power transfer switches are listed by Underwriters Laboratories, Inc. for transfer switch service and also meet the requirements of NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection* and NFPA 70, *National Electrical Code*. The automatic/manual power transfer switches are listed by Underwriters Laboratories, Inc. under UL-1008, *Automatic Transfer Switches*, as well as UL-508, *Industrial Control Equipment*.

Construction
The construction of the FTA950 power transfer switch includes an isolating disconnect switch/circuit breaker assembly, designed for fire pump service, providing short circuit, locked rotor and running current protection for the fire pump controller and the motor. The operating handle has a mechanical interlock so that the enclosure door can not be opened with the isolating disconnect switch in the ON position. The operating handle mechanism closes and opens both the isolating disconnect switch and the circuit breaker in the proper sequence. When the handle is moved to the ON position, the isolating disconnect switch is closed first and then the circuit breaker. When moved to the OFF position, the circuit breaker opens first and then the isolating disconnect switch. The circuit breaker always “makes” and “breaks” the load.

The transfer switch is electrically operated and mechanically held. The electrical operator is a momentarily energized, single solenoid mechanism. The switch is mechanically interlocked to ensure only two possible positions, normal or emergency. The transfer switch control panel features a 4 line, 20 character LCD display and keypad for viewing all available data and setting desired operational parameters. Source status screens are provided for both normal & emergency to provide digital readout of voltage, frequency and phase rotation on all 3 phases.

Included on the fire pump Mark IIXG user interface panel are LED’s for TRANSFER SWITCH NORMAL, TRANSFER SWITCH EMERGENCY and EMERGENCY ISOLATING SWITCH OFF. Mounted on the enclosure flange are TEST and TRANSFER BYPASS selector switches and the audible alarm.

FTA976 power transfer switches for use with Limited Service Controllers are constructed identically as the FTA950 except that a thermal magnetic circuit breaker is supplied and no disconnect switch is required. They are also available for use with single-phase Limited Service Controllers.

Short Circuit Current Rating
The short circuit current rating for the normal power source and the emergency power source side of the power transfer switch will be the same as the rating of the fire pump controller assembled with the power transfer switch.

User Interface
ASCO Group 5 Control Panel

Separately mounted transfer switches.

Firetrol® brand Separately Mounted Fire Pump Automatic Transfer Switches are designed for use when pump room size constraints will not allow an integral controller/transfer switch configuration, or where a transfer switch is now being required on an existing installation. They are intended for use with Listed and Approved fire pump controllers.

Approvals
Firetrol® Separately Mounted Fire Pump Automatic Transfer Switches are listed by Underwriters’ Laboratories, Inc., for transfer switch service and also meet the requirements of NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection

and NFPA 70, National Electrical Code. The transfer switches are listed by Underwriters Laboratories, Inc. under UL-1008, Automatic Transfer Switches, as well as UL-508, Industrial Control Equipment.

Configurations

Firetrol Separately Mounted Automatic Transfer Switches are available in the following configurations:

FTA902 – Provides the transfer of 3-phase power to a fire pump controller between a utility on the normal side and a generator on the alternate (emergency) side. The disconnecting means and overcurrent protective devices required for the normal side of the transfer switch are NOT supplied.

FTA903 – Provides the transfer of 3-phase power to a fire pump controller between a utility on the normal side and a generator on the alternate (emergency) side. The disconnecting means and overcurrent protective devices required for the normal side of the transfer switch ARE provided.

FTA952 – Provides the transfer of 3-phase power to a fire pump controller between a utility on the normal side and a 2nd utility on the alternate (emergency) side. The disconnecting means and overcurrent protective devices required for the normal side are NOT supplied. The disconnecting means and overcurrent protective for the alternate (emergency) side are NOT supplied.

FTA953 – Provides the transfer of 3-phase power to a fire pump controller between a utility on the normal side and a 2nd Utility on the alternate (emergency) side. The disconnecting means and overcurrent protective devices required for the normal side and alternate side of the transfer switch ARE provided.

Features

Firetrol Separately Mounted Automatic Transfer Switches feature the ASCO 7000 series transfer switch with Group 5 controller as standard. The microprocessor based controller includes a built-in keypad and four line LCD display mounted through the enclosure door. This allows all monitoring and control functions to be done with the door closed, providing convenience and safety.

The menu driven user interface allows setting changes to be made easily. These settings include:

- Voltage and Frequency
- Time Delays
- Features
- Engine Exerciser
- Event Log
- Service Features

Bypass-Isolation transfer switches

Firetrol® Automatic Transfer & Bypass-Isolation Switches are designed to be used with any Firetrol® Electric Fire Pump Controller. The entire package of Automatic Transfer & Bypass-Isolation Switch and Electric Fire Pump Controller is completely factory assembled, wired, tested and shipped as a complete unit for easy field connection to the power sources and the fire pump motor.

Automatic Transfer & Bypass-Isolation Switches are designed for critical applications where the transfer switch cannot be taken out of service for maintenance or repair purposes; these applications include health care facilities, data centers, retirement facilities and correctional institutions.

Approvals

Firetrol Automatic Transfer & Bypass-Isolation Switches are listed by Underwriters Laboratories, Inc. for transfer switch service and also meet the requirements of NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection and NFPA 70, National Electrical Code. The Automatic Transfer & Bypass-Isolation Switches are listed by Underwriters Laboratories, Inc. under UL-1008, Automatic Transfer Switches, as well as UL-508, Industrial Control Equipment.

Construction

The power transfer switch and the electric fire pump controller are assembled in separate but connected NEMA type 2 enclosures. All wiring between the two enclosures is completed by Firetrol. The enclosure containing the Automatic Transfer & Bypass-Isolation Switch is constructed with a dead front door-in-door design. The transfer switch BYPASS / ISOLATION handles as well as the operating controls & indicators are located behind the outer enclosure door. The enclosure containing the transfer switch disconnecting means and overcurrent protection is

attached adjacent to the transfer switch enclosure. The operating handle has a mechanical interlock so that the enclosure door cannot be opened with the isolating disconnect switch in the ON position.

Switch Features

- Allows bypass-isolation without load interruption.
- Bypass switch and transfer switch have identical electrical ratings.
- Heavy duty mechanical interlocks prevent undesirable operation.
- Bypass contacts carry current only during bypass mode.
- Bypass and isolation handles are permanently mounted.
- Bypass switch is fully rated for use as a manual 3-position transfer switch.
- Bypass and isolation functions are simple, requiring a total of two operating handles.
- No toggle switches, push buttons, selector switches or levers are required for bypass-isolation operation.
- Mechanical indicators show bypass and transfer switch positions.

Control

Automatic transfer switch control is provided by an ASCO® Group 5 Microprocessor based control panel. The control panel features a built-in keypad and four-line LCD display, allowing all monitoring and control functions to be done with the enclosure door closed. The six key keypad allows access to the easily navigated menu system to monitor system status or to adjust settings. A Transfer/Bypass panel provides a single line connection diagram with LED indication for switch positions and power source information. Also included on the panel is a lamp test push-button and Auto-Run engine selector switch.

Bypass and Isolation Operating Handles

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